

Remarks

Reconsideration and reexamination of the above-identified patent application, as amended, are respectfully requested. Claims 1-6, 8, 10-18, and 20 are pending in this application upon entry of this Amendment. In this Amendment, the Applicant has amended claims 1, 4, 8, 10, 13, 15, and 20; and cancelled claims 7, 9, and 19. No claims have been added in this Amendment. Of the pending claims, claims 1, 10, and 13 are independent claims.

Claim Rejections - 35 U.S.C. § 102

In the Office Action mailed June 15, 2006, the Examiner rejected claims 1-5, 7-11, and 13-20 (which include independent claims 1, 10, and 13) under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,854,593 issued to Dykema et al. ("Dykema"). The Applicant respectfully traverses the rejection of the claims under 35 U.S.C. § 102(b) and has amended independent claims 1, 10, and 13 to more clearly define the claimed subject matter.

1. The Examiner's Description of Dykema

The Examiner posited that Dykema discloses a control system having: a transceiver (58) to be mounted in a vehicle and configured to receive RF carrier signals and transmit an activation signal for receipt by barrier system receiver (66); a controller (57) to be mounted in a vehicle in communication with transceiver (58) and a user input device (44, 46, 47), controller (57) configured to store the received RF carrier signals, receive user input identifying an activation scheme having a variable code format associated therewith, and in response to user input, generate a variable code word based on the identified activation scheme, select one of the stored carrier signals, and control the transceiver to transmit an activation signal comprising the selected carrier signal modulated with the generated variable code word (citing col. 5, line 51 to col. 6, line 27). The Examiner further posited that Dykema discloses that transceiver (58) is configured to receive an activation signal having a fixed code

word from barrier system transmitter (65), and controller (57) is configured to store the fixed code word of the received activation signal, sample the carrier signal of the received activation signal, and control transceiver (58) to transmit an activation signal comprising the sampled carrier signal modulated with the stored fixed code word in response to user input (citing Fig. 8A, col. 15, lines 23-51; and col. 17, line 51 to col. 18, line 65).

2. Amended Independent Claim 1 Compared to Dykema

The control system set forth in amended independent claim 1 differs from Dykema in that the controller of the control system stores RF carrier signals received by the transceiver of the control system in a digital radio frequency memory (DRFM) and the controller, in response to user input identifying an activation scheme having a variable codeword format associated therewith, generates a variable codeword based on the identified activation scheme, selects one of the stored RF carrier signals from the DRFM based on the identified activation scheme and transfers the selected RF carrier signal from the DRFM to the transceiver, and controls the transceiver of the control system to transmit an activation signal comprising the selected RF carrier signal modulated with the generated variable codeword.

Dykema does not teach or suggest storing RF carrier signals in a DRFM. Rather, Dykema stores the carrier frequencies of activation signals being learned (i. e., Dykema stores numerals indicative of the carrier frequencies such as “850 MHz” and “900 MHz” instead of storing 850 and 950 MHz signals themselves). (See, col. 6, lines 14-19, “Thus, by identifying and storing the carrier frequency, modulation scheme, and data code of a received RF activation signal B originating from a remote transmitter 65, transceiver 43 may subsequently transmit an RF signal T having the identified characteristics of RF signal B that are necessary to activate a device such as garage door opener 66.”)

Dykema does not teach or suggest a controller receiving user input identifying an activation scheme having a variable codeword format associated therewith. Rather, the controller of Dykema receives user input indicative of which switch (44, 46, 47) has been

depressed with each switch already corresponding to a device, such as garage door opener 66, to be activated. (See, col. 6, lines 6-13, "Once the RF channel associated with one of switches 44, 46, and 47 has been trained to an RF activation signal B transmitted from a portable, remote transmitter 63 associated with a garage door opener 66 (for example), transceiver 43 will then transmit an RF signal T having the same characteristics as activation signal B to actuate a device such as garage door opener 66 when the corresponding switch (44, 46, 47) is momentarily depressed.")

Dykema does not teach or suggest a controller generating a variable codeword based on an activation scheme identified from user input, in which the activation scheme has a variable codeword format associated therewith. Rather, the controller of Dykema generates a codeword based on an activation scheme identified from a received RF activation signal. (See, col. 6, lines 14-19, "Thus, by identifying and storing the carrier frequency, modulation scheme, and data code of a received RF activation signal B originating from a remote transmitter 65, transceiver 43 may subsequently transmit an RF signal T having the identified characteristics of RF signal B that are necessary to activate a device such as garage door opener 66.")

Dykema does not teach or suggest selecting one of a plurality of stored RF carrier signals from a DRFM based on an activation scheme identified from user input nor does Dykema teach or suggest transferring the selected RF carrier signal from the DRFM to a transceiver for the transceiver to transmit an activation signal comprising the selected RF carrier signal modulated with a variable codeword generated by a controller. Rather, the controller of Dykema instructs a transceiver which radio frequency to use for an activation scheme identified from a received RF activation signal and the transceiver then uses signal generators, mixers, etc., to generate a RF carrier signal having the radio frequency. (See, col. 6, lines 14-19, "Thus, by identifying and storing the carrier frequency, modulation scheme, and data code of a received RF activation signal B originating from a remote transmitter 65, transceiver 43 may subsequently transmit an RF signal T having the identified characteristics of RF signal B that are necessary to activate a device such as garage door opener 66.")

In view of the foregoing amendments and remarks, the Applicant respectfully submits that amended independent claim 1 is patentable over Dykema. Claims 2-5 and 8 depend from amended independent claim 1 and include the limitations therein. Thus, the Applicant respectfully requests reconsideration and withdraw of the rejection to claims 1-5 and 8 under 35 U.S.C. § 102(b).

3. Amended Independent Claim 10 Compared to Dykema

The control system set forth in amended independent claim 10 differs Dykema in that the controller of the control system is configured to sample the carrier signal of an activation signal received by the transceiver of the control system from a barrier system transmitter using a digital radio frequency memory (DRFM), transfer the sampled carrier signal from the DRFM to the transceiver, and control the transceiver to transmit an activation signal comprising the sampled carrier signal modulated with the fixed codeword of the received activation signal in response to user input.

Dykema does not teach or suggest sampling the carrier signal of an activation signal received by a transceiver from a barrier system transmitter such as a remote transmitter using a DRFM. Rather, the transceiver of Dykema includes a tunable RF circuit that is selectively tuned to the carrier signal of a received activation signal during a training sequence. (See the Abstract and the Summary of the Invention sections.)

Dykema does not teach or suggest transferring the sampled carrier signal from a DRFM to the transceiver in order for the transceiver to transmit an activation signal comprising the sampled carrier signal modulated with a fixed codeword. Rather, the controller of Dykema instructs the transceiver which radio frequency to use for an activation scheme identified from the received RF activation signal and the transceiver then uses signal generators, mixers, etc., to generate a RF carrier signal having the radio frequency modulated with a fixed codeword. (See, col. 6, lines 14-19, "Thus, by identifying and storing the carrier frequency, modulation scheme, and data code of a received RF activation signal B originating

from a remote transmitter 65, transceiver 43 may subsequently transmit an RF signal T having the identified characteristics of RF signal B that are necessary to activate a device such as garage door opener 66.”)

In view of the foregoing amendments and remarks, the Applicant respectfully submits that amended independent claim 10 is patentable over Dykema. Claim 11 depends from amended independent claim 10 and include the limitations therein. Thus, the Applicant respectfully requests reconsideration and withdraw of the rejection to claims 10-11 under 35 U.S.C. § 102(b).

4. Amended Independent Claim 13 Compared to Dykema

The control method set forth in amended independent claim 13 differs Dykema in that RF carrier signals are stored in a DRFM and one of the stored RF carrier signals is selected from the DRFM based on an identified activation scheme for use in transmitting an activation signal comprising the selected RF carrier signal and a generated variable codeword.

Dykema does not teach or suggest storing RF carrier signals in a DRFM. Rather, Dykema stores the carrier frequencies of activation signals being learned (i.e., Dykema stores numerals indicative of the carrier frequencies such as “850 MHz” and “900 MHz” instead of storing 850 and 950 MHz signals themselves). Further, Dykema does not teach or suggest selecting one of the stored RF carrier signals from the DRFM based on an identified activation scheme for use in transmitting an activation signal comprising the selected RF carrier signal and a generated variable codeword. Rather, the controller of Dykema instructs a transceiver which radio frequency to use for an activation scheme identified from a received RF activation signal and the transceiver then uses signal generators, mixers, etc., to generate a RF carrier signal having the radio frequency. (See, col. 6, lines 14-19, “Thus, by identifying and storing the carrier frequency, modulation scheme, and data code of a received RF activation signal B originating from a remote transmitter 65, transceiver 43 may

subsequently transmit an RF signal T having the identified characteristics of RF signal B that are necessary to activate a device such as garage door opener 66.”)

In view of the foregoing amendments and remarks, the Applicant respectfully submits that amended independent claim 13 is patentable under 35 U.S.C. § 102(b) over Dykema. Claims 14-18 and 20 depend from amended independent claim 13 and include the limitations therein. Thus, the Applicant respectfully requests reconsideration and withdraw of the rejection to claims 13-18 and 20 under 35 U.S.C. § 102(b).

Claim Rejections - 35 U.S.C. § 103

The Examiner rejected claims 6 and 12 under 35 U.S.C. § 103(a) as being unpatentable over Dykema. Claims 6 and 12 respectively depend from amended independent claims 1 and 10 and include the limitations therein. Accordingly, the Applicant respectfully requests reconsideration and withdraw of the rejection to claims 6 and 12 under 35 U.S.C. § 103(a).

CONCLUSION

In summary, claims 1-6, 8, 10-18, and 20, as amended, meet the substantive requirements for patentability. The case is in appropriate condition for allowance. Accordingly, such action is respectfully requested.

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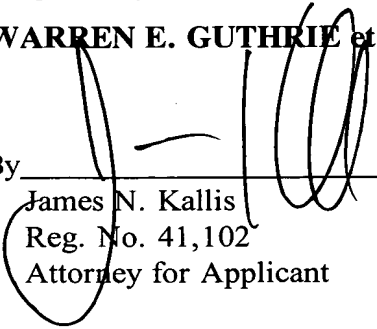
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If a telephone or video conference would expedite allowance or resolve any further questions, such a conference is invited at the convenience of the Examiner.

Respectfully submitted,

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